General

Title

Cancer - fatigue/anemia: percentage of patients found to have anemia with a hemoglobin less than 10 g/dl for whom the presence and severity of anemia-related symptoms (e.g., fatigue, dyspnea, and lightheadedness) were evaluated.

Source(s)

Dy SM, Lorenz KA, O'Neill SM, Asch SM, Walling AM, Tisnado D, Antonio AL, Malin JL. Cancer Quality-ASSIST supportive oncology quality indicator set: feasibility, reliability, and validity testing. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2010 Apr. 13 p. (Effective Health Care Program research report; no. 24).

Measure Domain

Primary Measure Domain

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients found to have anemia with a hemoglobin less than 10 g/dl for whom the presence and severity of anemia-related symptoms (e.g., fatigue, dyspnea, and lightheadedness) were evaluated.

Rationale

Although great strides have been made in cancer treatment, over one-third of patients with advanced

stage cancer will die within 6 months of diagnosis. While much of the oncology literature focuses on the prevention and early, potentially curative treatment of malignancies, palliation of the symptoms of metastatic cancer and its treatment and end of life care are essential for half of the people diagnosed with cancer.

Because symptoms are common and high impact, better symptom management offers a critical opportunity to relieve the burden of living with cancer. Systematic reviews identify pain, fatigue, anorexia, and breathlessness among the most common symptoms. Pooled estimates for the prevalence of symptoms in patients with advanced cancer range from 74% for fatigue to 11% for rash and for diarrhea (pain 71%, anorexia 53%, depression 39%, constipation 37%, insomnia 36%, dyspnea 35%, nausea 31%, cognitive symptoms 28%, oral symptoms 20%, vomiting 20%). Pain remains strikingly common and may affect more than a third of patients with earlier stage disease and more than two-thirds of patients with advanced cancer. The Institute of Medicine targeted improving cancer pain as a national priority.

Good supportive care encompasses four important areas: (1) treatment of cancer-related symptoms (2) prevention and treatment of the side-effects associated with cancer treatment, (3) recognition of and support for patients' experiencing psychosocial distress and (4) end of life care.

The Cancer Quality-ASSIST (Assessing Symptoms Side Effects and Indicators of Supportive Treatment) indicator set was developed to provide tools to assess the extent to which cancer care addresses the symptomatic and informational needs of patients and families.

Primary Clinical Component

Cancer; supportive cancer care; anemia-related symptoms (fatigue, dyspnea, lightheadedness)

Denominator Description

Number of cancer patients found to have anemia with a hemoglobin less than 10 g/dl

Numerator Description

Number of patients found to have anemia with a hemoglobin less than 10 g/dl for whom the presence and severity of anemia-related symptoms (e.g., fatigue, dyspnea, and lightheadedness) were evaluated

Evidence Supporting the Measure

Evidence Supporting the Criterion of Quality

A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

A systematic review of the clinical literature

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

Need for the Measure

Overall poor quality for the performance measured

Variation in quality for the performance measured

Evidence Supporting Need for the Measure

Dy SM, Asch SM, Lorenz KA, Weeks K, Sharma RK, Wolff AC, Malin JL. Quality of end-of-life care for patients with advanced cancer in an academic medical center. J Palliat Med. 2011 Apr;14(4):451-7. PubMed

Lorenz KA, Dy SM, Naeim A, Walling AM, Sanati H, Smith P, Shanman R, Roth CP, Asch SM. Quality measures for supportive cancer care: the Cancer Quality-ASSIST Project. J Pain Symptom Manage. 2009 Jun;37(6):943-64. PubMed

State of Use of the Measure

State of Use

Current routine use

Current Use

Internal quality improvement

Quality of care research

Application of Measure in its Current Use

Care Setting

Ambulatory Care

Hospitals

Physician Group Practices/Clinics

Professionals Responsible for Health Care

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

Lowest Level of Health Care Delivery Addressed

Group Clinical Practices

Target Population Age

Adults

Target Population Gender

Either male or female

Stratification by Vulnerable Populations

Unspecified

Characteristics of the Primary Clinical Component

Incidence/Prevalence

See the "Rationale" field.

Association with Vulnerable Populations

Unspecified

Burden of Illness

See the "Rationale" field.

Utilization

Unspecified

Costs

Unspecified

Institute of Medicine (IOM) Healthcare Quality Report Categories

IOM Care Need

End of Life Care

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding

Users of care only

Description of Case Finding

Cancer patients found to have anemia with a hemoglobin less than 10 g/dl

Denominator Sampling Frame

Patients associated with provider

Denominator Inclusions/Exclusions

Inclusions
Number of cancer patients found to have anemia with a hemoglobin less than 10 g/dl

Exclusions
Unspecified

Relationship of Denominator to Numerator

All cases in the denominator are equally eligible to appear in the numerator

Denominator (Index) Event

Clinical Condition

Diagnostic Evaluation

Encounter

Denominator Time Window

Time window is a single point in time

Numerator Inclusions/Exclusions

Inclusions
Number of patients found to have anemia with a hemoglobin less than 10 g/dl for whom the presence and severity of anemia-related symptoms (e.g., fatigue, dyspnea, and lightheadedness) were evaluated

Exclusions
Unspecified

Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

Numerator Time Window

Encounter or point in time

Data Source

Administrative data

Medical record

Level of Determination of Quality

Individual Case

Pre-existing Instrument Used

Unspecified

Computation of the Measure

Scoring

Rate

Interpretation of Score

Better quality is associated with a higher score

Allowance for Patient Factors

Unspecified

Standard of Comparison

Internal time comparison

Evaluation of Measure Properties

Extent of Measure Testing

A team of researchers developed an initial potential set of indicators based on a systematic review of

clinical trials, guidelines, and quality indicators. An expert panel evaluated the validity and feasibility of potential quality indicators using a formal rating and consensus process, and thereby guided the selection of final indicators. Of 133 proposed quality indicators, a total of 92 (69%) were judged valid and feasible by the panel. In a pilot study of the 92 medical record-based Cancer Quality-ASSIST (Assessing Symptoms Side Effects and Indicators of Supportive Treatment) supportive oncology quality indicators, following development and implementation of an abstraction tool, use of trained abstractors, and analysis of quantitative and qualitative abstraction results, including interrater reliability, 41 met strict criteria for feasibility, reliability and validity for advanced cancer across two clinical settings. These indicators represent all domains of the original ASSIST set except mucositis, insomnia, and fever/neutropenia. Overall kappa for the included set of indicators was 0.87 for eligibility and 0.86 for specified care.

Evidence for Reliability/Validity Testing

Dy SM, Lorenz KA, O'Neill SM, Asch SM, Walling AM, Tisnado D, Antonio AL, Malin JL. Cancer Quality-ASSIST supportive oncology quality indicator set: feasibility, reliability, and validity testing. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2010 Apr. 13 p. (Effective Health Care Program research report; no. 24).

Lorenz KA, Dy SM, Naeim A, Walling AM, Sanati H, Smith P, Shanman R, Roth CP, Asch SM. Quality measures for supportive cancer care: the Cancer Quality-ASSIST Project. J Pain Symptom Manage. 2009 Jun;37(6):943-64. PubMed

Identifying Information

Original Title

If a patient with cancer is found to have anemia with a hemoglobin less than 10 g/dl, then the presence and severity of anemia-related symptoms (e.g., fatigue, dyspnea, and lightheadedness) should be evaluated.

Measure Collection Name

Cancer Quality-ASSIST Project Quality Indicators

Measure Set Name

Fatigue/Anemia

Submitter

RAND Corporation - Nonprofit Research Organization

Developer

RAND Corporation - Nonprofit Research Organization

Funding Source(s)

Composition of the Group that Developed the Measure

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Financial Disclosures/Other Potential Conflicts of Interest

None of the authors has a financial interest in any of the products discussed in this report.

Adaptation

Measure was not adapted from another source.

Release Date

2010 Apr

Measure Status

This is the current release of the measure.

Source(s)

Dy SM, Lorenz KA, O'Neill SM, Asch SM, Walling AM, Tisnado D, Antonio AL, Malin JL. Cancer Quality-ASSIST supportive oncology quality indicator set: feasibility, reliability, and validity testing. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2010 Apr. 13 p. (Effective Health Care Program research report; no. 24).

Measure Availability

The individual measure, "If a patient with cancer is found to have anemia with a hemoglobin less than 10 g/dl, then the presence and severity of anemia-related symptoms (e.g., fatigue, dyspnea, and lightheadedness) should be evaluated," is published in "Cancer Quality-ASSIST Supportive Oncology Quality Indicator Set: Feasibility, Reliability, and Validity Testing." This document is available in Portable Document Format (PDF) from the Agency for Healthcare Research and Quality (AHRQ) Effective Health Care Program Web site   .

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NQMC Status

This NQMC summary was completed by ECRI Institute on February 4, 2011. The information was verified by the measure developer on March 31, 2011.

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